

and 2734 of title 10 and section 715 of title 32 involving military claims; to the Committee on the Judiciary.

H.R. 3639. An act to protect the public health by amending the Federal Food, Drug, and Cosmetic Act to consolidate certain provisions assuring the safety and effectiveness of new animal drugs, and for other purposes; to the Committee on Labor and Public Welfare.

#### SECRETARY IGNATIUS ADDRESSES NAVY LEAGUE

Mr. DIRKSEN. Mr. President, last Friday, October 27, the Secretary of the Navy, the Honorable Paul R. Ignatius, addressed the Navy League in Chicago on the occasion of its annual Navy Day banquet—always a notable event in the city of Chicago and throughout Illinois.

The Secretary's subject on that occasion was the use of nuclear power to propel our naval vessels, and he presented to his sizable audience one of the clearest and most comprehensive descriptions of our preparations and our policies in this regard that it has ever been my pleasure to read.

Because I believe this timely message from the Secretary of the Navy to be of great and continuing importance to our people, I ask unanimous consent that its full text be printed at this point in the RECORD.

There being no objection, the address was ordered to be printed in the RECORD, as follows:

REMARKS BY HON. PAUL R. IGNATIUS, SECRETARY OF THE NAVY, AT THE NAVY LEAGUE NAVY DAY BANQUET, CHICAGO, ILL., OCTOBER 27, 1967

Ladies and gentlemen, I can think of no more appropriate place for the Secretary of the Navy to be on Navy Day. Chicago's people are hospitable to our personnel, and your industry and technology contribute to our effectiveness. Your city has always been known as a good Navy town.

We are grateful for this, particularly at a time when Naval and Marine Corps personnel are engaged in combat, as they are so courageously today in Vietnam. These fine men are demonstrating each day, by their valor and dedication, that the Naval Service is indeed the Mark of a Man. Your Navy Day theme was well chosen.

Tonight I want to review with you a matter of current and continuing importance to the Navy—the use of nuclear power to propel our ships. We look on Chicago as the place of birth of this greatest advance in naval technology of this century.

Nuclear power was harnessed in Chicago on a cold, windy day in December 1942, when the first chain reaction was achieved on the University of Chicago campus.

Enrico Fermi, the Italian scientist who guided the experiment proposed to Dr. Arthur H. Compton that the test should take place without delay in the now famous squash court under the west stands of the Stagg Athletic Field.

Dr. Compton has written of the doubts that surrounded that event: "... the experiment would be performed in the midst of a great city. We did not see how a true nuclear explosion, such as that of an atomic bomb, could possibly occur. [But] the outcome of the experiment might ... greatly affect the city."

The experiment was a success and, for the first time, the power of the atom was liberated and controlled.

Even before the first test of a fission bomb in the Summer of 1945, far-sighted naval officers had seen the possibilities of using nuclear power for naval propulsion.

Following a period of intensive debate within the Government, as is not unusual in the face of revolutionary change, the Atomic Energy Commission, in April 1948, authorized a Submarine Thermal Reactor project proposed by the Navy. The first research and conceptual design work on the reactor was done here in Chicago, at the Argonne National Laboratory.

A naval officer from Chicago, Vice Admiral Hymen G. Rickover, has played the central role. He was the leading advocate of nuclear power for naval use and he has been in charge of the program responsible for the application of nuclear power to naval ships.

We are still reaping the benefits of the foresight and energy of this great American. In a moment, I will describe the extent to which the U.S. Navy has made the transition to nuclear propulsion. That background is important because we face decisions that will determine the role of the nuclear-powered surface escort in the Navy. I refer to the application of nuclear power to ship types which are outgrowths of the World War II destroyer—the guided missile frigates and destroyers. It is this issue of nuclear power which I will address tonight.

In January 1955, U.S.S. *Nautilus*, the first nuclear-powered submarine, put to sea. Other nuclear-powered attack submarines followed, and will total 68 when those authorized complete construction. The operational accomplishments of these ships are well known to you:

Voyages under the polar ice cap by *Nautilus* and *Skate*.

Surfacing at the North Pole by *Skate*.

Circumnavigation of the globe, while submerged, by *Triton*.

Steaming on nuclear power for more than 60,000 miles, without refueling, by *Nautilus*.

It was these early phenomenal successes with submarines that led to the strategic concept of relatively invulnerable underwater platforms for ballistic missiles.

Largely through the leadership of Vice Admiral William F. Raborn, Jr., the Navy and private industry joined the capabilities of nuclear-powered submarines to an underwater-launched ballistic missile system and produced our country's most nearly survivable deterrent system, commonly referred to as Polaris.

In November 1960, the first Polaris submarine, U.S.S. *George Washington*, deployed on patrol. Today, only 7 years later all 41 of the authorized fleet ballistic missile submarines have entered the Fleet.

At the same time, work on applying the advantages of nuclear power to the surface Navy went ahead with the result that U.S.S. *Enterprise*, the largest attack aircraft carrier ever built, and the guided missile cruiser, U.S.S. *Long Beach*, were commissioned in 1961.

U.S.S. *Bainbridge*, a nuclear-powered guided missile frigate, was commissioned in 1962, and her sister ship, U.S.S. *Truxtun*, joined the Fleet in June of this year.

*Enterprise*, *Long Beach*, and *Bainbridge* have completed recent deployments to the Seventh Fleet in the Western Pacific. With these ships and *Truxtun*, the Navy is gaining operational experience with nuclear-powered surface ships.

*Enterprise* and *Long Beach* have shown the ease with which nuclear-powered ships can steam at speeds of more than 30 knots for indefinite periods, permitting the prompt deployment of naval offensive power to any point of need. Last June, when it was possible that naval forces would be required in the Red Sea, *Enterprise* and *Long Beach*, then in the South China Sea, could have been placed on station in the Suez Canal area within a period of about one week. Conventionally powered ships that were available, including supporting fleet oilers, would have taken almost twice that time.

While in the Seventh Fleet, *Long Beach*

was assigned to a task in support of air operations against North Vietnam. This task required *Long Beach's* maintaining an independent station in a relatively small area. Since *Long Beach* did not have to withdraw from station to refuel periodically, and since she could steam at higher speed than conventional ships while in transit to station, she was able to be on the line almost a month longer than a conventional ship.

Thus, from such experience, we are establishing firm evidence of just some of the operational advantages that can be derived from nuclear-powered surface ships.

Throughout the Seventh Fleet deployment of these nuclear-powered ships, their operations were characterized by high reliability of the engineering plants and an instant readiness to move from one assignment to another without the time delay involved in dependence of fleet oilers.

In the sustained type of operations being conducted in Southeast Asia, nuclear power minimizes the periods these ships are off station or in transit from one task assignment to another. In terms of utilization, experience in that area shows that three nuclear ships can do what four conventionally powered ships do in a similar six to seventh month deployment. This factor is particularly significant in extended combat situations, like Vietnam, where rotation of ships on and off the line and from one task group to another is required to sustain the level of pressure desired.

The future course of Naval nuclear-powered ship construction will be judged and decided against this background of 12 years' experience.

We have moved aggressively to develop a force of nuclear-powered attack submarines, ballistic missile submarines, and attack carriers. Many of these ships are already at sea. Their operational experience, in diverse missions, has been beyond anything we could have imagined 20 years ago.

The Navy is planning a construction program for nuclear-powered attack carriers in alternate years. Construction of U.S.S. *Nimitz* will commence soon and the Secretary of Defense has approved two additional nuclear-powered carriers, programmed to start in fiscal year 1969 and 1971.

The unresolved issue before the Navy is how many and what kind of nuclear-powered escort ships we should build, such as *Long Beach*, *Bainbridge*, and *Truxtun*, in order to escort and support our attack carriers, both nuclear and conventionally-powered, and to give added operational flexibility to all types of naval task forces.

The question involves a complex analysis of whether the greater cost of nuclear-powered surface escort ships is offset by their greater effectiveness. The best course of action is less clear than nuclear power for submarines and attack carriers. Escort ships will have to perform multiple combat tasks, similar in scope to the missions assigned to the work-horse World War II destroyer with which many of you are familiar.

Our present-day surface escort fleet—the destroyers, destroyer escorts, frigates and cruisers that give protection to our carrier task forces, underway replenishment groups, and amphibious task forces—contains many ships that were built in World War II. These are rapidly approaching the point where the combat capability they represent must be supplemented and improved by new ships.

The Navy is embarked on an analysis to define the type and number of escorts required in the future. We are looking at all the traditional destroyer tasks—

Detection and killing of submarines;

Defense against aircraft and, in the modern combat environment against missiles;

Shore bombardment; and

A capability for self-defense when operating independently or at long distances from the task force which the escort is assigned to support.

# Senate

TUESDAY, NOVEMBER 7, 1967

The Senate met at 12 o'clock meridian, and was called to order by the Acting President pro tempore (Mr. METCALF).

The Chaplain, Rev. Frederick Brown Harris, D.D., offered the following prayer:

Almighty God, who art the abiding peace of the universe, we bow before Thee in humility and reverence. In the mercies of yet another day, we come with hearts grateful for Thy grace, praying that, by a strength not our own, our individual record may be kept by any word or act unworthy of our best.

To Thee we lift our hearts in prayer, bringing nothing but our need and the adoration of our contrite spirits. From Thy hands we have received the gift of life, the blessings of home and of friendship, and the sacrament of beauty. In the fullness of Thy mercy Thou hast given us work to do and the strength wherewith to do it.

Inspire and guide with Thy spirit these servants of the people—the few among the many—lifted to high pedestals of power and responsibility, to the end that they may be found faithful stewards of the Nation's trust.

Set our feet on lofty places,  
Gird our lives that they may be  
Armored with all Christlike graces  
In the fight to set men free;  
Grant us wisdom, grant us courage  
That we fail not man nor Thee.

In the dear Redeemer's name, Amen.

## THE JOURNAL

Mr. LONG of Louisiana. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Monday, November 6, 1967, be dispensed with.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

## COMMITTEE MEETINGS DURING SENATE SESSION

Mr. LONG of Louisiana. Mr. President, I ask unanimous consent that all committees be authorized to meet during the session of the Senate today.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

## LIMITATION ON STATEMENTS DURING TRANSACTION OF ROUTINE MORNING BUSINESS

Mr. LONG of Louisiana. Mr. President, I ask unanimous consent that statements in relation to the transaction of routine morning business be limited to 3 minutes.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

## MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Hackney, one of its reading clerks, announced that the House had passed, without amendment, the following bills and joint resolution of the Senate:

S. 219. An act to authorize the Secretary of Agriculture to sell certain land in Lander, Wyo., and for other purposes;

S. 423. An act authorizing the use of additional funds to defray certain increased costs associated with the construction of the small-boat harbor at Manele Bay, Lanai, Hawaii, and for other purposes;

S. 1391. An act to cancel certain construction costs and irrigation assessments chargeable against lands of the Fort Peck Indian Reservation, Mont.;

S. 2179. An act to extend for 3 years the special milk programs for the Armed Forces and veterans hospitals; and

S.J. Res. 114. Joint resolution extending the duration of copyright protection in certain cases.

The message also announced that the House had passed the bill (S. 780) to amend the Clean Air Act to authorize planning grants to air pollution control agencies; expand research provisions relating to fuels and vehicles; provide for interstate air pollution control agencies or commissions; authorize the establishment of air quality standards, and for other purposes, with an amendment, in which it requested the concurrence of the Senate.

The message further announced that the House had passed the joint resolution (S.J. Res. 33) to establish a National Commission on Product Safety, with amendments, in which it requested the concurrence of the Senate.

The message also announced that the House had passed the following bills, in which it requested the concurrence of the Senate:

H.R. 1341. An act to amend section 701 of title 10, United States Code, to authorize additional accumulation of leaves in certain foreign areas;

H.R. 2138. An act to amend section 319 of the Immigration and Nationality Act to permit naturalization for certain employees of U.S. nonprofit organizations engaged in disseminating information which significantly promotes U.S. interest, and for other purposes;

H.R. 3629. An act to protect the public health by amending the Federal Food, Drug, and Cosmetic Act to consolidate certain provisions assuring the safety and effectiveness of new animal drugs, and for other purposes;

H.R. 3982. An act to amend section 409 of title 37, United States Code, relating to the transportation of house trailers and mobile dwellings of members of the uniformed services;

H.R. 6692. An act declaring a portion of Bayou Lafourche, La., a nonnavigable waterway of the United States;

H.R. 6547. An act to amend title 10, United States Code, to simplify laws relating to members of the Army, Navy, Air Force, and Marine Corps, and for other purposes;

H.R. 12912. An act to give the consent of Congress to the State of Ohio to become a party to the agreement relating to bus taxation proration and reciprocity as set forth in title II of the act of April 14, 1965 (79 Stat. 60), and consented to by Congress in that act and in the acts of November 1, 1966 (79 Stat. 1157), and November 2, 1966 (60 Stat. 1156);

H.R. 13165. An act to extend the period during which Secret Service protection may be furnished to a widow and minor children of a former President; and

H.R. 13669. An act to amend section 2734 of title 10 of the United States Code to permit the use of officers of any of the services on claims commissions, and for other purposes; to amend section 2734a of title 10 to authorize the use of Coast Guard appropriations for certain claims settlements arising out of Coast Guard activities; and to amend section 2736 of title 10 to authorize advance payments in cases covered by sections 2733 and 2734 of title 10 and section 715 of title 32 involving military claims.

## HOUSE BILLS REFERRED

The following bills were severally read twice by their titles and referred, as indicated:

H.R. 1341. An act to amend section 701 of title 10, United States Code, to authorize additional accumulation of leaves in certain foreign areas;

H.R. 3982. An act to amend section 409 of title 37, United States Code, relating to the transportation of house trailers and mobile dwellings of members of the uniformed services; and

H.R. 8547. An act to amend title 10, United States Code, to simplify laws relating to members of the Army, Navy, Air Force, and Marine Corps, and for other purposes; to the Committee on Armed Services.

H.R. 2138. An act to amend section 319 of the Immigration and Nationality Act to permit naturalization for certain employees of U.S. nonprofit organizations engaged in disseminating information which significantly promotes U.S. interest, and for other purposes;

H.R. 12912. An act to give the consent of Congress to the State of Ohio to become a party to the agreement relating to bus taxation proration and reciprocity as set forth in title II of the act of April 14, 1965 (79 Stat. 60), and consented to by Congress in that act and in the acts of November 1, 1966 (79 Stat. 1157), and November 2, 1966 (60 Stat. 1156); and

H.R. 13669. An act to amend section 2734 of title 10 of the United States Code to permit the use of officers of any of the services on claims commissions, and for other purposes; to amend section 2734a of title 10 to authorize the use of Coast Guard appropriations for certain claims settlements arising out of Coast Guard activities; and to amend section 2736 of title 10 to authorize advance payments in cases covered by sections 2733 and 2734 of title 10 and section 715 of title 32 involving military claims.

S 15913